PEDIATRICS

UNDER THE CHARGE OF

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Whooping-cough, Complicated by Acute Nephritis, Lobular Pneumonia, and Left-sided Hemiplegia.—This remarkable case, which terminated in recovery, is reported by A. E. BLACKBURN (*Jour. Amer. Med. Assoc.*, 1908, i, 530). A child, aged four and one-half years, had been suffering with whooping-cough for six weeks, during which time he was not under the care of a physician. He spent a great deal of time in the open air during a period of extreme dampness and cold. He was seized suddenly with a general convulsion, followed immediately by coma. Other causes having been eliminated, the child was catheterized and albumin in large quantities found in the urine. During the uremic state the temperature rose to 108°, the child was pulseless, and respirations were very high. The coma lasted for ten days. A few days later the right upper lobe showed signs of consolidation anteriorly, and during this the temperature again rose to 107°, the pulse again became impalpable and death seemed imminent. Inability to expectorate several times almost caused death through strangulation, but the crisis was safely passed, when constant convulsive movements were noticed in the right side; the right arm and leg could be moved, but not the left. A complete left-sided paralysis, involving the left arm, leg, side of the face, and the left external rectus was noted as the child became sufficiently conscious. The nephritis gradually disappeared, the pneumonia resolved, and the cough again became whooping in character; it finally disappeared. Seven months after the onset the patient walked with a halt and the left arm was weaker than the right; otherwise he had completely recovered. The stimulation throughout was rather vigorous for a child so young.

A New Constituent of Milk (Lactoconium).—A. KREIDL and A. NEUMANN (*Wien. klin. Woch.*, 1908, xxi, 214) report examining the milk of different species (cow, rabbit, guinea-pig, dog, cat, and woman) with the ultramicroscope. They discovered in the milk of the lower animals a corpuscular constituent, which they could not find in the milk of woman. The milk of the animals contained a large number of small particles, which were in constant violent molecular movement. These the authors propose to call lactoconia, until their true nature is discovered.

Parathyroidal Meningitis in Infants.—Two such cases are reported by L. ARTZ and J. BOESE (*Wien. klin. Woch.*, 1908, xxi, 217) in infants respectively seven weeks and five months old. In both cases the primary conditions had been gastro-enteritis, in the course of which the meningitis developed. In both instances Gram-positive cocci were isolated, which, in the second case, at least, could positively be identified with the paratyphoid bacillus of Schottmüller. It was agglutinated by the immune serum from the Bacterium paratyphus Schottmüller B., and the serum from it agglutinated the corresponding emulsions of bacteria. The agglutination was noted in as high a dilution as 1 to 24,000, the exposure being one-half hour at room temperature. In the case of the coccus from the first case agglutination occurred only in dilutions of 1 to 1000, but in spite of this a similar conclusion could be arrived at. This shows that paratyphoid infections occur at a very early age, probably by way of the intestinal tract and lead to a bacteremia. As there are many cases of fibropurulent meningitis in childhood, the authors suggest, in view of the already large number of cases of typhoid and colon meningitis described in children, that all bacteriological and serodiagnostic aids should be employed to discover the exact nature of every case of meningitis in infants and children.

The Influence of Thyroidal Feeding upon the Nitrogenous Metabolism of Children.—A. ORGLER (*Zeit. f. exper. Path.*, 1908, v, 1) performed his experiments to determine the influence of large amounts of thyroid substance upon the general health, the pulse, and respirations of infants and children. The usual reports are that they react entirely differently from adults; another object of his observations was, whether they do not react at all or simply compensate the injuries better. The amount of nitrogen and uric acid was determined; four children were given large quantities of fresh thyroidal substance, two others were given potassium iodide, and one iodeigon; the latter to determine the influence of an organic iodide, and artificially iodized albumin. In addition to the thyroid gland, the children were given only milk and zwieback. The general health of all remained perfectly good is spite of the large amount of thyroid gland given; the pulse and respiration were not influenced in the slightest. In every case a larger amount of nitrogen was excreted, however, than was taken in. In the case of the three children given iodides and iodeigon, the nitrogen excretion was not increased. The body weight in two of the children fed with thyroid decreased; in the others it remained stationary.

The Value of the Suprarenal Glands in the Pathology and Treatment of Rachitis.—Stoelzner, after feeding a number of children at the Berlin pediatric clinic with suprarenal substance, reported marked improvement in rachitic symptoms due to retention of calcium salts. The symptoms which, in particular, improved were the sweats, craniotabes, slow dentition, sensitiveness to pain, restlessness, and vasomotor irritability; the children learned to sit, stand, and walk at a much earlier period than other rachitics. The abnormality of the thorax and verterbal column diminished, the fontanelle became smaller, the rachitic rosary and the epiphyseal swellings of the long bones disappeared. Stoelzner believed this improvement to be due to the retention of lime salts after feeding with suprarenal substance. To note the truth or falsity of this theory R. OUEST (*Zeit. f. exper. Path.*, 1908, v, 43) performed a number of experiments with young dogs, determining the excretion of the calcium and the nitrogen. He could not determine a retention, but could observe an unfavorable influence upon the calcium metabolism, which lasted not only while the dogs were being fed, but also for some time after. A number of clinical observations have also refuted the theory of Stoelzner, and it therefore seems probable that suprarenal extract has no more influence on rickets than have other organic substances as thyroidin, thymus extract, etc. The glycosuria and arteriosclerosis noted in these and other reported experiments are due not only to increase in blood pressure, but much more so to a toxic action of the adrenalin upon the entire organism.

Rennet Coagulation in the Stomach of Nursing Infants.—The question whether the cheese clots forming in the stomachs of nursing animals and infants are formed by rennin or hydrochloric acid has been studied and solved by A. KREIDL and A. NEUMANN (*Zentralbl. f. Physiol.*, 1908, xxii, 133) by means of the ultramicroscope. Casein clots produced by the action of acids could be seen by the ultramicroscope to return to their original fine emulsion before dissolving, when sodium hydrate was added; the clots produced through coagulation with rennin were dissolved by the alkali without returning to this stage. Milk clots from the stomach of nursing animals, as well as clots from the stomach of an infant fed with cow's milk, were dissolved directly by the rennin, thus showing that in all probability the milk in the nursing infant's stomach is clotted by the rennin and not the hydrochloric acid. That the same is true of human milk is more than probable, as the infant's stomach contains active rennin, and is acid in reaction, and it has been shown in vitro that human milk is coagulated by rennin.

An Analysis of 500 Cases of Spinal Infantile Paralysis.—J. COLLINS and T. H. ROMEISER (*Jour. Amer. Med. Assoc.*, 1908, i, 1766) present, in tabulated form, the analysis of 500 cases of spinal infantile paralysis, 327 of which they observed during the epidemic of 1907 and 173 previous to it. There were 297 males and 203 females; 311 developed in the months of July, August, and September; 62 were less than one year old, 158 between one and two years, and 134 between two and three years, thus showing that by far the greater number are less than three years old. High fever was noted in 145, slight fever in 191, no fever in 29; in 261 patients it lasted less than four days; in 100 more than four days. Vomiting was recorded in 151, anorexia in 78, diarrhœa in 49, constipation in 88, retention in 37, incontinence in 5, somnolence in 87, stupor in 40, unconsciousness in 10, rigidity and retraction in 56, insomnia and restless in 34, twitching in 66, convulsions in 18, delirium in 18, screaming in 32, crying in 59, and immotility in 59. One leg was paralyzed in 216, both legs in 134; in 65 the lumbar and gluteal muscles; in 36 one arm and in 5 both; in 35 cranial nerves were affected; 32 had quadriplegia, 27 triplegia, in 29 the abdomen and diaphragm and in the same number the neck muscles, in 20 the back muscles, in 15 the rectus occuli, in 14 the larynx and tongue, in 9 the facial muscles and also those of the chest, in 6 the sphincters, and in 3 the pharynx. The lumbar enlargement is oftenest affected, next the cervical and then the dorsal, not infrequently also the bulbar structures. The diaphragm was paralyzed only once. Trauma was noted very rarely as a preceding factor; most of the children previously were in the best of health; the paralysis was usually noted two to four days after the onset of the disease. Both ascending and descending Landry types of paralysis were observed. The infection finds the entire central nervous system and its coverings susceptible. A considerable number of their patients made a fair recovery.